

ABSTRACT OF THE DISCLOSURE

Systems and methods for removing perchlorate load off of ion exchange resins are disclosed. The systems and methods rely upon direct contact between the resin and a liquid product formed by the culturing of perchlorate-destroying microorganisms. These methods can be incorporated into methods for removing perchlorate from aqueous streams. A resin product comprising an anion exchange resin with a coating of perchlorate-destroying microorganisms on its surface is also disclosed.